

Comparisons of Job Characteristics

Focus Occupation: Supervisors of Construction and Extraction Workers (47-1011)

Associated Occupation: Civil Engineers (17-2051)

[Compare Knowledge](#)

[Compare Skills](#)

[Compare Abilities](#)

[Compare Detailed Work Activities](#)

[Compare Tools and Technologies](#)

<<	Focus occupation element is much lower
<	Focus occupation element is lower
0	Focus occupation element is at a similar level
>	Focus occupation element is at a higher level
>>	Focus occupation element is at a much higher level

Knowledge

Similarity of Focus Occupation to Associated Occupation: 68

Focus Occupation: Supervisors of Construction and Extraction Workers (47-1011)

Associated Occupation: Civil Engineers (17-2051)

Associated Occupation's Key Knowledge Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating		Evaluation of Focus Occupation
Engineering and Technology	5.7	24.5	10.6	<<	Extensive education and/or training may be required
Design	5.2	23.4	10.9	<<	Extensive education and/or training may be required
Building and Construction	4.0	21.6	16.9	<<	Extensive education and/or training may be required
Mathematics	9.2	20.0	12.8	<<	Extensive education and/or training may be required
Physics	4.3	15.8	5.8	<<	Extensive education and/or training may be required
Transportation	4.6	13.9	5.6	<<	Extensive education and/or training may be required
Administration and Management	8.4	13.0	12.8	0	Current knowledge level may be sufficient
Public Safety and Security	6.9	12.6	10.2	<	Expanded education and/or training may be required
Law and Government	5.9	11.3	6.0	<<	Extensive education and/or training may be required
Chemistry	4.8	10.8	6.2	<<	Extensive education and/or training may be required
Geography	3.9	9.7	3.7	<<	Extensive education and/or training may be required

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Skills

Similarity of Focus Occupation to Associated Occupation: 50

Focus Occupation: Supervisors of Construction and Extraction Workers (47-1011)

Associated Occupation: Civil Engineers (17-2051)

Associated Occupation's Key Skills Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating	Evaluation of Focus Occupation	
Mathematics	6.2	15.7	6.4	<<	Extensive development of skills in this area may be required
Operations Analysis	5.0	14.6	7.6	<<	Extensive development of skills in this area may be required
Complex Problem Solving	9.1	14.5	9.1	<<	Extensive development of skills in this area may be required
Judgment and Decision Making	9.4	14.5	10.0	<<	Extensive development of skills in this area may be required
Science	4.5	11.9	3.8	<<	Extensive development of skills in this area may be required
Systems Analysis	6.5	11.7	7.2	<<	Extensive development of skills in this area may be required
Systems Evaluation	6.4	11.7	7.3	<<	Extensive development of skills in this area may be required
Management of Personnel Resources	6.9	11.2	11.6	0	Current skill level may be sufficient
Management of Material Resources	3.7	9.1	5.6	<<	Extensive development of skills in this area may be required
Management of Financial Resources	3.3	8.9	4.4	<<	Extensive development of skills in this area may be required

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Abilities		Similarity of Focus Occupation to Associated Occupation: 86			
Focus Occupation: Supervisors of Construction and Extraction Workers (47-1011) Associated Occupation: Civil Engineers (17-2051)					
Associated Occupation's Key Abilities Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating	Evaluation of Focus Occupation	
Problem Sensitivity	11.1	15.4	12.1	<<	Extensive improvement in abilities may be required
Deductive Reasoning	10.6	15.2	11.2	<<	Extensive improvement in abilities may be required
Mathematical Reasoning	6.3	14.9	6.9	<<	Extensive improvement in abilities may be required
Inductive Reasoning	10.2	14.4	10.4	<<	Extensive improvement in abilities may be required
Visualization	7.5	14.1	9.8	<<	Extensive improvement in abilities may be required
Number Facility	6.3	13.9	8.2	<<	Extensive improvement in abilities may be required
Information Ordering	9.9	13.8	10.1	<<	Extensive improvement in abilities may be required
Category Flexibility	9.0	13.4	8.8	<<	Extensive improvement in abilities may be required
Flexibility of Closure	7.8	13.3	7.7	<<	Extensive improvement in abilities may be required
Perceptual Speed	7.4	11.8	8.2	<<	Extensive improvement in abilities may be required
Speed of Closure	5.9	9.9	5.4	<<	Extensive improvement in abilities may be required

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Activities that Both Occupations Have in Common

Similarity of Focus
Occupation to Associated
Occupation: 76

Focus Occupation: Supervisors of Construction and Extraction Workers (47-1011)
Associated Occupation: Civil Engineers (17-2051)

Work Activities	Exclusivity of Activity
Assign work to staff or employees	30
Direct and coordinate activities of workers or staff	3
Direct and coordinate construction of mine shafts or tunnels	89
Estimate materials or labor requirements	61
Inspect project operations, or site to determine specification compliance	72
Perform safety inspections in construction or resource extraction setting	46
Plan construction of structures or facilities	75
Prepare reports	8
Read blueprints	10
Read technical drawings	7
Understand construction specifications	53

Not all positions in these occupations will necessarily perform all of the listed activities. The exclusivity rating is an indication of how unique the activity is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations engage in that activity.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Tools and Technologies that Both Occupations Have in Common

Similarity of Focus
Occupation to Associated
Occupation: 80

Focus Occupation: Supervisors of Construction and Extraction Workers (47-1011)
Associated Occupation: Civil Engineers (17-2051)

Tools and Technologies	Exclusivity
Audio and visual equipment	4
Business function specific software	1
Cameras	2
Computers	1
Content authoring and editing software	1
Data management and query software	1
Indicating and recording instruments	2
Industry specific software	1
Information exchange software	1
Land surveying instruments	19
Length and thickness and distance measuring instruments	2
Measuring and layout tools	3
Meteorological instruments	16

Not all positions in these occupations will necessarily use all of the listed tools and technologies. The exclusivity rating is an indication of how unique the tool or technology is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations use that tool or technology.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.